

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016529**Date Inspected:** 30-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC)**Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No			
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006	Component:	OBG Trial Assembly				

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Incident Report generated at Segment 9DW

This Quality Assurance (QA) Inspector wrote an Incident Report for distorted bolt hole due to drifting action at Longitudinal Diaphragm web at PP 82 for Segment 9DW at work point W4. Please reference the Incident Report 04-0120F4_TL-15_B278_08-30-2010_LD_Web_distorted bolt hole_due to drifting_9DW at PP 82_at W4 dated August 30, 2010 for further details.

Please reference the pictures attached for more comprehensive details.

Segment 9CW to Segment 9DW (Skin Flatness)

This QA Inspector performed Joint Inspection along with the ABF QA Inspector to check and verify the Skin Flatness between Segment 9DW to Segment 9EW between Panel Points (PP) 79 and PP 80 at the following locations after weld buttering and flush grinding to adjust the out of tolerance area:

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The skin flatness was measured on South side (Bike Path side B4 location) Straight Edges of 600mm and 630 mm of length was also used to measure the localized flatness.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 9CW to Segment 9DW

This QA Inspector performed Dimension Control Inspection along with ABF QA Inspector on the Longitudinal Diaphragm to Longitudinal Diaphragm at Work Point W3 (Counter Weight side) and W4 (Cross Beam) for the Segment 9CW to Segment 9DW between Panel Point (PP) 79 to PP 80 at the following locations:

The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The Sweep was measured at 100 mm from both sides of the Floor Beam and 800mm from both sides of floor Beam and at Center (Total 5 Locations) using string line.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 9DE to Segment 9EE (U-Rib to U-Rib)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the U-Rib to U-Rib at the transverse splice between Panel Points (PP) 82 and PP 83 for Segment 9DE to Segment 9EE. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00467 dated August 30, 2010.

The bolt sizes used were M22 x 70 RC Lot # DHGM220027 and the final torque value established was 450 N-m.

The Manual Torque wrench used was Serial No. XO2-666. Please reference the pictures attached for more comprehensive details.

Suspender Bracket at Bay # 19

This QA Inspector performed Dimension Control Inspection along with ABF QA Inspector to check and measure the Suspender Bracket (SB) lifting rod hole spacing by placing the socket template at the following suspender brackets.

SB 72E which will be installed at Segment 9AE, Bike Path side.

SB 78E which will be installed at Segment 9CE, Bike Path side.

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SB 84E which will be installed at Segment 9EE, Bike Path side.

SB 72W which will be installed at Segment 9AW, Counter Weight side.

SB 80W which will be installed at Segment 9DW, Counter Weight side.

SB 82W which will be installed at Segment 9DW, Counter Weight side.

SB 84W which will be installed at Segment 9EW, Counter Weight side.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Anchorage Bearing Stiffeners at Machine Shop # 1

This QA Inspector performed Dimension Control Inspection to check and measure the Anchorage Bearing Stiffeners at machine shop # 1. The following below mentioned dimensions was inspected.

Anchoring Bearing Stiffeners, anchor rod scribe line distance.

Anchoring Bearing Stiffeners, anchor rod offset #1 and offset # 2 from scribe line.

Anchoring Bearing Stiffeners, vertical spacing between the bearing stiffeners at four ends of bearing stiffener.

Anchoring Bearing Stiffeners, vertical offset.

Anchoring Bearing Stiffeners, surface condition meeting mill to bear condition at MTB1, MTB2 and MTB3 locations.

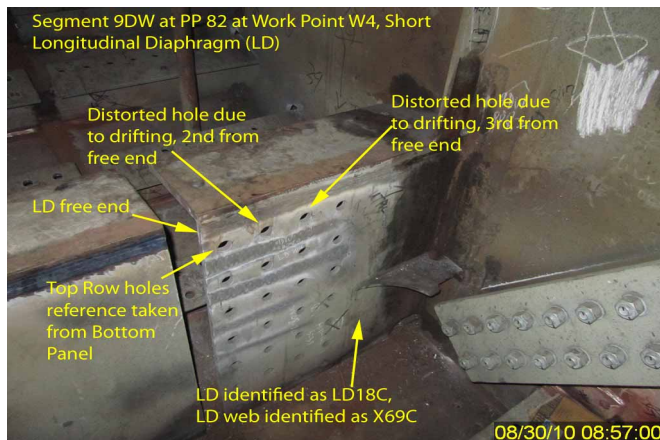
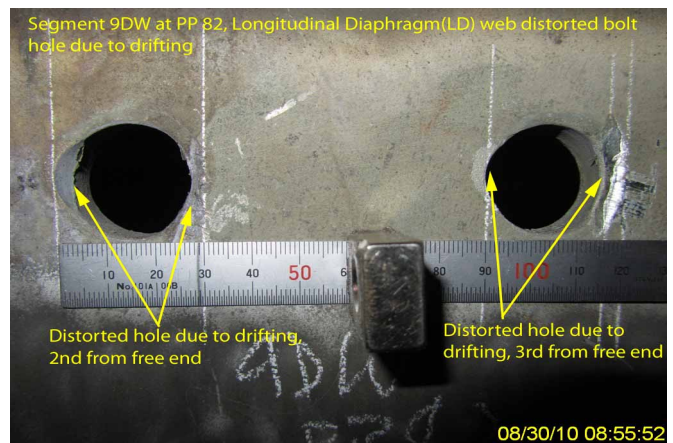
The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead

Inspector and Engineer for review and disposition. Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
